

Quarterly Report – Public Page

Date of Report: *March 31 2016*

Contract Number: DTPH56-15-T00003

Prepared for: Pipeline and Hazardous Materials Safety Administration

Project Title: *Critical Review of Candidate Pipeline Risk Models*

Prepared by: *C-FER Technologies*

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For quarterly period ending: *March 2016*

Technical Status

- Searched for publicly available literature on risk models from 34 databases in Engineering and Technology subject area.
- Collected and reviewed more than 40 published papers on the risk models applicable to oil and gas transmission pipelines.
- Collected and reviewed more than 15 published papers on the risk models applicable to other industries, such as offshore, nuclear, aviation, and power transmission.

Project Deliverables Completed this Quarter:

- Collected and reviewed pipeline industry risk models. Analyzed strength and weaknesses of the risk models, and summarized findings.
- Collected and reviewed information regarding the quantitative risk models used in other industries such as offshore, nuclear, aviation and power transmission systems.

Analyzed strength and weaknesses of the risk models in other industries, and summarized findings

Activities Planned for Next Quarter:

- Develop guidelines for building and validating usable quantitative pipeline risk models that address the needs of both operators and regulators.
- Provide commentary on the applicability of pipeline risk models to NGL terminals and pipeline facilities and the potential for integrated risk assessment.
- Present a summary of project progress to the Pipeline Risk Model Working Group in June 2016
- Prepare draft final project report providing a list of references reviewed and a summary of review findings, and describing requirements and guidelines for the development of quantitative risk models for pipelines.